PDR RID Report

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Document
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RID ID PDR 142
Review CSMS
Originator Ref
Priority 2

Category Name System-level
Actionee Project
Sub Category Program level guidelines
Subject Data products and in-line QA SCF requirements.

Description of Problem or Suggestion:

How are the data products to be produced by ECS and the in-line QA SCF requirements, if any, identified and defined in the system baseline? The current baseline is not definitive in this area and the process by which in-line QA SCFs would be identified is not clear.

Originator's Recommendation

GSFC Response by: Rama **GSFC Response Date**

Topic 1 - Product Baseline: The set of standard products to be produced by ECS are a superset of the products listed in the Execution Phase Project Plan for EOS [May 1995] and is recorded in the Science Processing Support Office database. This database has been updated with information provided by the Ad Hoc Working Group on Processing (AHWGP) regarding the product characteristics. The latest versions of the database are used as technical baselines as we proceed with successive stages of development of EOSDIS. However, we agree that there is no formal process in place to establish a "certified and signed" baseline of products. For this reason, while it is beyond the purview of the ESDIS Project, the ESDIS Science Office has suggested the establishment of a Science Requirements Board (SRB) to establish and manage changes to such a products' baseline. Given the breadth of the community affected by the products' list and changes to it, it is important that the SRB have representation by the instrument teams, interdisciplinary investigators, Program and Project Scientists, DAACs and the ESDIS Project.

Topic 2 - Quality Assurance: Each of the instrument Team Leaders and the Principal Investigators is responsible for the "routine intellectual quality control" of their respective standard data products as part of their EOS Algorithm activities [Execution Phase Project Plan for the Earth Observing System]. The general issue of Quality Assurance of EOS Products is being coordinated by the ESDIS Science Office and the Ad Hoc Working Group on Production (AHWGP).

This RID raises a number of issues related to the definition and implementation of QA methodology of EOS products. These are addressed below.

Item 1 - Specification of SCF QA requirements

• Several drafts of a procedural plan for the development of a coordinated QA methodology for the generation of EOS products have been iterated with the Instrument Teams (ITs) and the DAACs for comment. Within the last draft, an implementation scheme and a schedule has been developed that involve the participation of the ITs, the DAACs, the IDS teams and the general user science community. The involvement of all these groups is to ensure that the final QA methodology will satisfy both the science requirements of the producers of the data products, as well as the consumers of the products.

• Specifically, the ITs and the DAACs will generate three iterations of QA Plans for their products, with each iteration providing greater detail of their QA methodology and QA parameters; the IDS teams will be given questionnaires soliciting them for their general QA needs from the producers of the standard products; and a panel will be formed from the science user community to advise in the general area of the organization and the content of the archived QA statistics.

Item 2 - Specification the SCF QA Process

• The general process of how a SCF would perform a QA function: QA flags or the generated products themselves may be "pulled" by the SCFs via the subscription service, (an event that triggers a specific response - in this case a data transfer from DAAC to the requester at the SCF) for QA analysis at the SCF. The SCF would then perform their QA functions on the received data and generate their own "SCF" QA flags or statistics. The SCF would then send these QA parameters back to the DAAC, via the ingest service, (a service request that directs the system to ingest data from an external data provider), where they would be included within the product or the metadata.

• The gathering of the information related to network transfer rates between the SCFs and the DAACs will be principally coordinated by the AHWGP, though this information is also requested within the QA Plans generated by the ITs and the DAACS.

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HAIS Response by: Forman **HAIS Schedule**

HAIS R. E. Armstrong **HAIS Response Date**

Status **Closed** **Date Closed** **7/26/95** **Sponsor** **Rama**

****** **Attachment if any** ******